ABSTRACT OF THE DISCLOSURE

A method and apparatus provides the capability for activating, i.e., annealing or ablating, LASER activated fuses from the back-side of an integrated circuit chip using multiple-photon absorption techniques that allow the absorbed LASER energy to be highly localized in three dimensions. According to the invention, the photons from the LASER have an energy less than the band gap energy of the substrate material, therefore absorption in areas of the substrate other than the focal point is avoided. According to the invention, objects such as LASER activated fuses that lie either within the integrated circuit substrate, or on the opposite surface, i.e., the active surface, of the integrated circuit substrate can be accessed and activated by the LASER energy. Consequently, using the method of the invention, LASER activated fuses can be activated after the integrated circuit chip has been mounted in a flip-chip configuration and/or as part of a Multiple-Chip-Module.